WHAT IS CLAIMED IS:

1. A lightning arrester for absorbing lighting falling down from a thundercloud, the lightning arrester comprising:

a fixing base fixedly installed on an object to be protected by grounding a lightning circuit connected to a ground electrode grounded to an earth;

a fixing bar vertically installed at one side of an upper surface of the fixing base and made of conductive material;

a main electrode section making contact with an upper portion of the fixing bar and made of conductive material;

an upper polymer insulator including an elongated column member formed at a center thereof with a hollow section for receiving the fixing bar therein, and upper and lower disc-shaped plates integrally formed at an upper end of the elongated column member for ensuring an insulation distance; and

an auxiliary electrode section aligned below the main electrode section without making contact with the main electrode section and made of conductive material, the elongated column member of the upper polymer insulator passing through a center of the auxiliary electrode section in order to fill space charge in the auxiliary electrode section.

2. The lightning arrester as claimed in claim 1, wherein the main electrode section has a disc-shaped base plate formed at a center thereof with a hole for receiving a protrusion of the fixing bar and a plurality of triangular shaped top plates formed along an outer peripheral surface of the disc-shaped base plate while forming a predetermined interval therebetween.

3. The lightning arrester as claimed in claim 2, wherein the auxiliary electrode section includes a first auxiliary electrode member made of conductive material, formed at an

upper surface thereof with a plurality of triangular plates arranged at a predetermined interval and formed at a center thereof with a first perforation hole for receiving the elongated column member of the upper polymer insulator, a pair of second auxiliary electrode members made of conductive material, making contact with an underside of the first auxiliary electrode member and formed at a center thereof with a second perforation hole for receiving the elongated column member of the upper polymer insulator, a third auxiliary electrode member made of conductive material and having a hollow column member receiving the elongated column member of the upper polymer insulator, and a filler, upper and lower ends of the elongated column member extending beyond upper and lower ends of the hollow column member, the upper end of the hollow column member making contact with an underside of the second auxiliary electrode members, a space is being formed between an inner wall of the third auxiliary electrode member and an outer wall of the elongated column member when the elongated column member is received in the third auxiliary electrode member, the filler being filled in the space formed between the inner wall of the third auxiliary electrode member and the outer wall of the elongated column member in order to improve capacitance of the third auxiliary electrode member, O-rings being installed at upper and lower portions of the space in order to prevent the filler from being leaked.

4. The lightning arrester as claimed in claim 3, further comprising a lower polymer insulator aligned below the auxiliary electrode section in order to ensure the insulation distance, the lower polymer insulator being provided at a center thereof with a short column member, upper and lower disc-type plates being integrally formed with an upper outer wall of the short column member while forming a predetermined interval therebetween.

5. The lightning arrester as claimed in claim 4, further comprising a fastening member screw-coupled to one end of the fixing bar in order to press a lower surface of the auxiliary electrode section, the fastening member being formed at a center thereof with a screw

hole.

6. The lightning arrester as claimed in claim 2, wherein the filler includes TiO_2.

7. The lightning arrester as claimed in claim 4, further comprising a pair of fourth auxiliary electrode sections having a diameter larger than a diameter of the second auxiliary electrode members, an upper surface of the fourth auxiliary electrode sections making contact with an underside of the second auxiliary electrode sections, a lower surface of the fourth auxiliary electrode sections making contact with an upper end of the third auxiliary electrode member.

8. The lightning arrester as claimed in claim 4, further comprising a sixth auxiliary electrode member aligned between the third auxiliary electrode member and a fixing member and made of conductive material identical to conductive material forming the second auxiliary electrode member.